



SAW Components

Data Sheet B7841

Data Sheet

An abstract graphic featuring the word "EPCOS" in large, glowing, 3D letters. The letters are white with a blue glow and are positioned diagonally across the frame. In the background, there is a faint, stylized globe with circuitry patterns, suggesting a global network or technological theme. The overall color scheme is dark with blue and white highlights.



SAW Components

B7841

Low-Loss Filter

2441,75 MHz

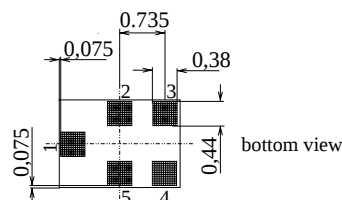
Data Sheet



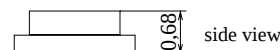
Chip Sized Saw Package

Features

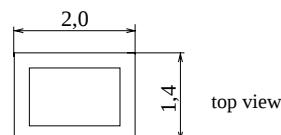
- Low-loss RF filter for bluetooth
- Usable passband 83,5 MHz
- Unbalanced to unbalanced operation
- Package for **Surface Mounted Technology (SMT)**



bottom view



side view



top view

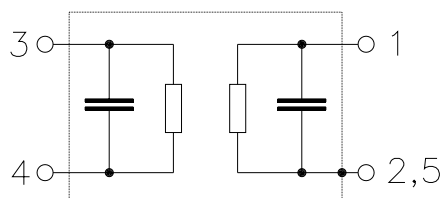
Terminals

- Ni, gold-plated

Dimensions in mm, approx. weight 0,007g

Pin configuration

- | | |
|-----|--------------------|
| 1 | Input, unbalanced |
| 4 | Output, unbalanced |
| 2,5 | Case ground |
| 3 | to be grounded |



Type	Ordering code	Marking and Package according to	Packing according to
B7841	B39242-B7841-C710	C61157-A7-A82	F61074-V8151-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 40 /+ 85	°C	Machine Model, 10 pulses
Storage temperature range	T_{stg}	- 40 /+ 85	°C	
DC voltage	V_{DC}	3	V	
ESD voltage	V_{ESD}	50*	V	
Input power max.	P_{IN}	6	dBm	source/load impedance 50Ω
2400...2483,5 MHz		15		
824...915, 1710...1980 MHz				

* - acc. to JESD22-A115A (Machine Model), 10 negative & 10 positive pulses



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Characteristics

Operating temperature range: $T = -40$ to $+85\text{ }^{\circ}\text{C}$
Terminating source impedance: $Z_S = 50\text{ }\Omega - 1,5\text{ nH}$ (serial)
Terminating load impedance: $Z_L = 50\text{ }\Omega - 2,5\text{ nH}$ (serial)

		min.	typ.	max.	
Center frequency	f_c	—	2441,75	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$				
2400,0 ... 2483,5 MHz		—	2,2	3,3	dB
Return loss					
2400,0 ... 2483,5 MHz*)		9,0	11,5	—	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
2400,0 ... 2483,5 MHz		—	0,5	1,5	dB
Attenuation	α				
100,0 ... 960,0 MHz		40	44	—	dB
960,0 ... 2150,0 MHz		32	38	—	dB
2150,0 ... 2170,0 MHz		30	36	—	dB
2170,0 ... 2250,0 MHz		20	35	—	dB
2250,0 ... 2295,0 MHz		15	21	—	dB
2295,0 ... 2300,0 MHz		12	20	—	dB
2550,0 ... 2600,0 MHz		15	20	—	dB
2600,0 ... 2650,0 MHz		18	23	—	dB
2650,0 ... 2800,0 MHz		20	24	—	dB
2800,0 ... 4000,0 MHz		25	30	—	dB
4000,0 ... 6000,0 MHz		30	50	—	dB

*) $T = +25\text{ }^{\circ}\text{C}$



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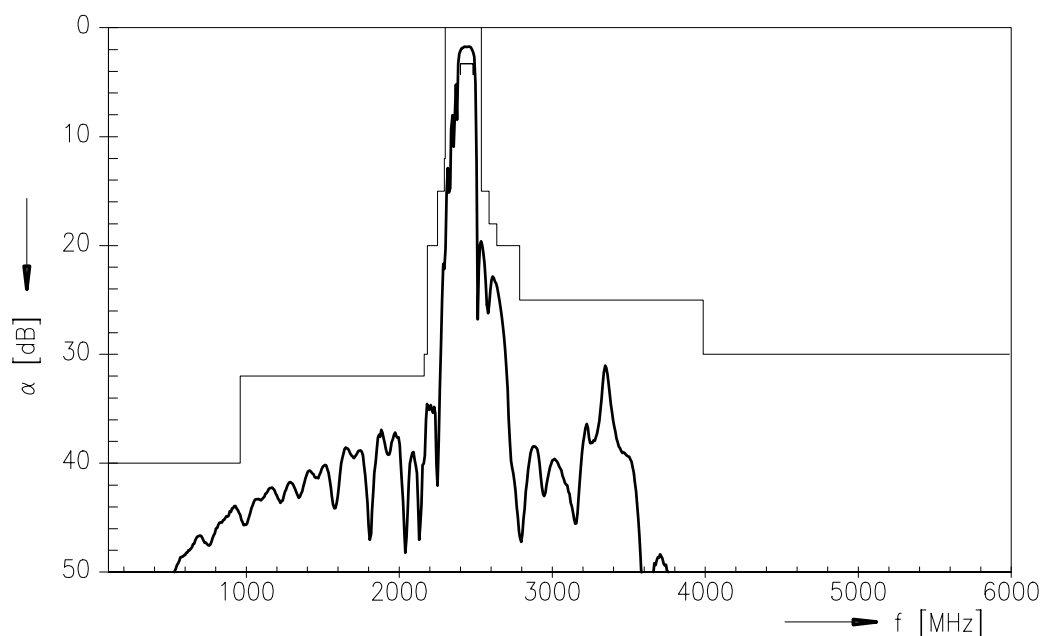
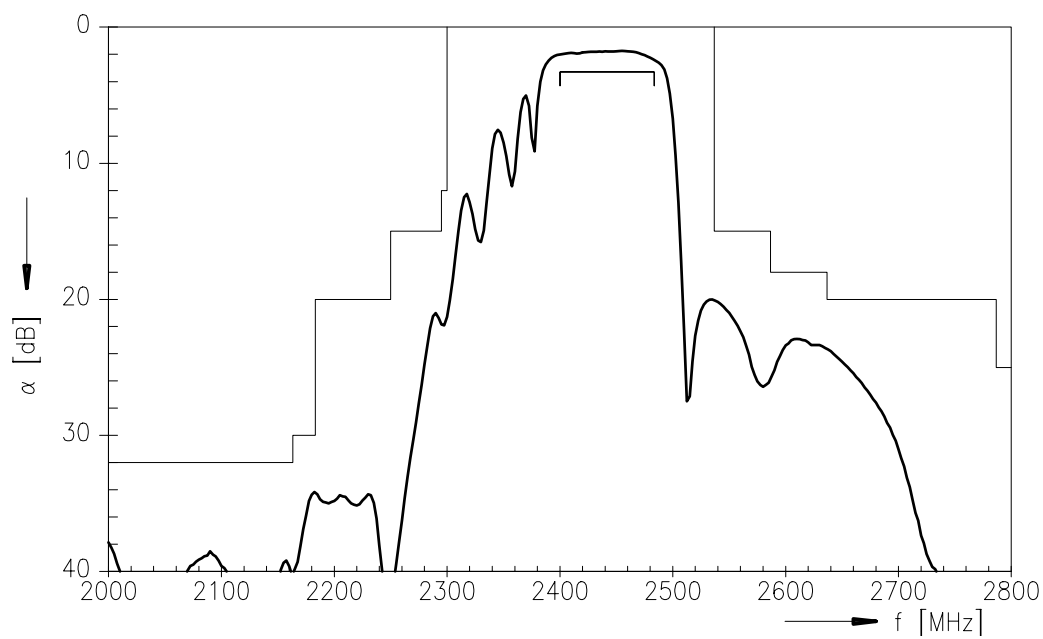
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Transfer function





SAW Components	B7841
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Data Sheet	SMD

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